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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/083,477	02/27/2002	Kojiro Hamabe	01-053452	4780

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VIENNA, VA 22182-3817

EXAMINER

TRAN, TUAN A

ART UNIT	PAPER NUMBER
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2682

DATE MAILED: 12/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/083,477

Applicant(s)

HAMABE, KOJIRO

Examiner

Tuan A Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 12-17, 24 and 25 is/are rejected.
- 7) ☒ Claim(s) 6-11 and 18-23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-2, 4, 12-14, 16 and 24-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Marchetto et al. (WO 98/19414).

Regarding claim 1, Marchetto discloses a mobile communication system capable of selecting any one of a plurality of transmission modes for data transmission of a unit of block between the base station controlled by a base station control apparatus and a mobile phone (See page 2 line 18 to page 3 line 11), comprising: detecting means that is provided in the mobile station and detects occurrence of a receiving error of a unit of block; and switching selecting means for switching the transmission mode based on the occurrence of the receiving error N to be detected by the detecting means (See figs. 2-3 and page 6 line 24 to page 7 line 16).

Claim 13 is rejected for the same reasons as set forth in claim 1, as method.

Claim 25 is rejected for the same reasons as set forth in claim 1.

Regarding claim 2, Marchetto discloses as cited in claim 1. Marchetto further discloses the switching selecting means is configured to switch the transmission mode to a mode slower than a current mode when detection of the occurrence of the receiving

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error by the detecting means reaches n times (the sum of the individual symbol errors for a complete pilot symbol block as cited in page 6 lines 32-33); wherein n is an integer equal or more than one (See fig.3 and page 6 line 24 to page 7 line 16).

Claim 14 is rejected for the same reasons as set forth in claim 2, as method.

Regarding claim 4, Marchetto discloses as cited in claim 1. Marchetto further discloses the switching selecting means is configured to switch the transmission mode to a mode faster than a current mode when a receiving error rate (sum of the individual symbol errors per pilot symbol block) becomes a predetermined value (See fig.3 and page 6 line 24 to page 7 line 16, page 8 lines 13-16) wherein the pilot symbol block inherently occupies a predetermined time set in advance (See fig. 1A).

Claim 16 is rejected for the same reasons as set forth in claim 4, as method.

Regarding claim 12, Marchetto discloses as cited in claim 1. Marchetto further discloses the switching selecting means is disposed in the base station (See page 7 lines 13-14).

Claim 24 is rejected for the same reasons as set forth in claim 12, as method.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 3, 5, 15, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marchetto et al. (WO 98/19414).

Regarding claim 3, Marchetto discloses as cited in claim 1. However, Marchetto does not mention that the switching selecting means is configured to switch the transmission mode to a mode faster than a current mode when detection of successful receipt of the data transmission by the detecting means continues for m times (m is an integer larger than n). Since Marchetto further discloses the switching selecting means is configured to switch the transmission mode to a mode faster than a current mode when the occurrence of the receiving error becomes a predetermined value (sum of the individual symbol errors for a complete pilot symbol block) (See fig.3 and page 6 line 24 to page 7 line 16, page 8 lines 13-16); therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to configure the switching means to switch the transmission mode to a mode faster than a current mode when the successful receipt of the data transmission continues for m times (sum of the individual symbol corrections for a complete pilot symbol block) wherein m is inherently larger than n when the received data is acceptable for the advantage of expanding detection capability of the system to various techniques in order to control the operation of the system more efficient.

Claim 15 is rejected for the same reasons as set forth in claim 3, as method.

Regarding claim 5, Marchetto discloses as cited in claim 3. Marchetto further discloses the switching selecting means is configured to determine switching to the

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faster mode according to a target block error rate in the data transmission (See fig.4 and page 8 lines 1-6).

Claim 17 is rejected for the same reasons as set forth in claim 5, as method.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Yoshida (EP 0963074); Andersson et al. (2002/0055359); Haim (6,823,194); Lynn (6,662,009); Hill et al. (6,381,467); Klayman et al. (5,699,365); Landry et al. (5,450,438).

Allowable Subject Matter

3. Claims 6-7, 8-11, 18-19 and 20-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claims 6-7, Marchetto discloses as cited in claim 1. However, Marchetto does not mention that the switching selecting means is configured to switch the transmission mode to a mode slower than a current mode when a block error rate in a predetermined first number of blocks set in advance is larger than a first predetermined block error rate set in advance and switch the transmission mode to a mode faster than a current mode when a block error rate in a predetermined second number of blocks set in advance (second predetermined number of blocks > first predetermined number of blocks) is smaller than a second predetermined block error

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rate set in advance and to a mode slower than a current mode when a block error rate in the predetermined second number of blocks is equal to or larger than a third predetermined block error rate set in advance.

Claims 18-19 are objected for the same reasons as set forth in claim 6-7, as method.

Regarding claims 8-11, Marchetto discloses as cited in claim 1. However, Marchetto does not mention that the switching selecting means is configured to switch the transmission mode to a mode slower than a current mode when a block error rate in predetermined first time set in advance is larger than a first predetermined block error rate set in advance and switch the transmission mode to a mode faster than a current mode when a block error rate in predetermined second time set in advance (second predetermined time > first predetermined time) is smaller than a second predetermined block error rate set in advance and to a mode slower than a current mode when a block error rate in the predetermined second time is equal to or larger than a third predetermined block error rate set in advance.

Claims 20-23 are objected for the same reasons as set forth in claims 8-11, as method.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Tuan Tran** whose telephone number is **(703) 605-4255**.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Vivian Chin**, can be reached at **(703) 308-6739**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

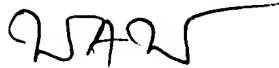
Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

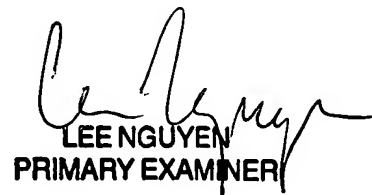
Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.



Tuan Tran

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LEE NGUYEN
PRIMARY EXAMINER